

ABSTRACT OF THE DISCLOSURE

An improved electromagnetic actuator having a coil (10) on which a current is impressed, a magnet (20) that forms a magnetic circuit across a magnetic gap (G) with a magnet yoke (21), and having a diaphragm (11) that vibrates when a high-frequency current is impressed, and a vibration plate (22) that vibrates when a low-frequency current is impressed, with these parts enclosed within a basket (3) and the coil (10) placed within the magnetic gap (G). As one invention, a radial array of magnets, a vibration plate with a double-suspension structure, and a bottom plate of magnetic shielding material are placed in the basket to suppress the leakage of magnetic flux. As an invention to further improve the frequency characteristics by means of the mounting structure of the electromagnetic actuator, elastic packing (5, 7) is sandwiched between the basket of the electromagnetic actuator and the housing case of the portable electronic equipment, and also between the basket of the electromagnetic actuator and the mounting.